IN THE CLAIMS:

The following listing of claims will replace all prior versions, and listings, of claims in the application.

1.   (Currently Amended) A computer-implemented method for creating a graphical program that performs a numerical function, the method comprising:

displaying a node in a graphical program in response to user input, wherein the node is operable to perform a first numerical function, wherein the node is configurable with a plurality of collection modes, wherein each collection mode defines a subset of received data values on which to perform the first numerical function;

configuring the node to receive data values, in response to user input;

configuring the node with ~~criteria information~~ a first collection mode in response to user input selecting the first collection mode from the plurality of collection modes, wherein ~~the criteria information~~ configuring the node with the first collection mode indicates that the first numerical function is to be performed on a subset, but not all, of the data values received by the node;

executing the graphical program;

the node receiving a plurality of data values during execution of the graphical program, wherein the node maintains state information regarding the received data values;

the node determining a first data collection on which to perform the first numerical function based on the ~~criteria information~~ first collection mode and the state information, wherein the first data collection comprises a subset, but not all, of the plurality of data values received; and

the node performing the first numerical function on the first data collection.

2. (Currently Amended) The method of claim 1, further comprising:

receiving user input requesting to specify configuration information for the node;

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displaying a graphical user interface (GUI) for specifying configuration information for the node, in response to the user input requesting to specify configuration information for the node;

wherein said configuring the node with ~~the first collection mode~~ criteria information in response to user input comprises configuring the node with the first collection mode ~~criteria information~~ in response to user input received via the GUI.

3. (Canceled)

4. (Currently Amended) The method of claim [[3]] 1,

wherein the node is configurable with one or more of the following collection modes:

Sliding Block; and

Fixed Block.

5. (Original) The method of claim 1,

wherein the node is a primitive node provided by a graphical programming development environment for inclusion in the graphical program.

6. (Previously Presented) The method of claim 1,

wherein the first numerical function performed on the first data collection comprises one of:

a numerical average function;

a summation function;

a minimum value function;

a maximum value function.

7. (Previously Presented) The method of claim 1,

wherein said configuring the node to receive data values comprises connecting a wire to an input terminal of the node from an output terminal of another node in the graphical program, in response to user input;

wherein said node receiving the plurality of data values during execution of the graphical program comprises the node receiving the plurality of data values via the wire connected to the input terminal of the node.

8. (Canceled)

9. (Currently Amended) A memory medium for creating a graphical program that performs a numerical function, the memory medium comprising program instructions executable to:

display a node in a graphical program in response to user input, wherein the node is operable to perform a first numerical function, wherein the node is configurable with a plurality of collection modes, wherein each collection mode defines a subset of received data values on which to perform the first numerical function;

configure the node to receive data values, in response to user input;

configure the node with ~~criteria information~~ a first collection mode in response to user input selecting the first collection mode from the plurality of collection modes, wherein ~~the criteria information~~ configuring the node with the first collection mode indicates that the first numerical function is to be performed on a subset, but not all, of the data values received by the node;

wherein during execution of the graphical program, the node is operable to:

receive a plurality of data values;

maintain state information regarding the received data values;

determine a first data collection on which to perform the first numerical function based on the ~~criteria information~~ first collection mode and the state information, wherein the first data collection comprises a subset, but not all, of the plurality of data values received; and

perform the first numerical function on the first data collection.

10. (Currently Amended) The memory medium of claim 9, further comprising program instructions executable to:

receive user input requesting to specify configuration information for the node;

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display a graphical user interface (GUI) for specifying configuration information for the node, in response to the user input requesting to specify configuration information for the node;

wherein said configuring the node with ~~the first collection mode~~ ~~criteria information in response to user input~~ comprises configuring the node with the <u>first collection mode</u> ~~criteria information~~ in response to user input received via the GUI.

11. (Canceled)

12. (Currently Amended) The memory medium of claim [[11]] <u>9</u>,

wherein the node is configurable with one or more of the following collection modes:

Sliding Block; and

Fixed Block.

13. (Original) The memory medium of claim 9,

wherein the node is a primitive node provided by a graphical programming development environment for inclusion in the graphical program.

14. (Previously Presented) The memory medium of claim 9,

wherein the first numerical function performed on the first data collection comprises one of:

a numerical average function;

a summation function;

a minimum value function;

a maximum value function.

15. (Previously Presented) The memory medium of claim 9,

wherein said configuring the node to receive data values comprises connecting a wire to an input terminal of the node from an output terminal of another node in the graphical program, in response to user input;

wherein said node receiving the plurality of data values during execution of the graphical program comprises the node receiving the plurality of data values via the wire connected to the input terminal of the node.

16. (Canceled)

17. (Currently Amended) The method of claim 1, ~~further comprising:~~ <u>further comprising:</u>
<u>configuring the node with</u> ~~wherein the criteria information specifies~~ a <u>specified</u> number of data values on which to perform the first numerical function;

wherein said node receiving the plurality of data values during execution of the graphical program comprises the node receiving a greater number of data values than the <u>specified</u> number of data values; ~~specified by the criteria information;~~

wherein the number of data values in the first data collection is equal to the <u>specified</u> number of data values. ~~specified by the criteria information.~~

18. (Previously Presented) The method of claim 1,
wherein the node is further operable to perform a second numerical function;

wherein the method further comprises the node performing the second numerical function on the first data collection, in addition to performing the first numerical function on the first data collection.

19. (Previously Presented) The method of claim 18,
wherein the node includes a first output terminal for outputting a result of performing the first numerical function on the first data collection and a second output terminal for outputting a result of performing the second numerical function on the first data collection.

20-24. (Canceled)

25. (New) A system comprising:
one or more processors;

memory storing program instructions; and

a display device;

wherein the program instructions are executable by the one or more processors to:

display on the display device a node in a graphical program in response to user input, wherein the node is operable to perform a first numerical function, wherein the node is configurable with a plurality of collection modes, wherein each collection mode defines a subset of received data values on which to perform the first numerical function;

configure the node to receive data values, in response to user input;

configure the node with a first collection mode in response to user input selecting the first collection mode from the plurality of collection modes, wherein configuring the node with the first collection mode indicates that the first numerical function is to be performed on a subset, but not all, of the data values received by the node;

wherein during execution of the graphical program, the node is operable to:

receive a plurality of data values;

maintain state information regarding the received data values;

determine a first data collection on which to perform the first numerical function based on the first collection mode and the state information, wherein the first data collection comprises a subset, but not all, of the plurality of data values received; and

perform the first numerical function on the first data collection.